Amendments to the Specification:

Please amend the Specification, as follows:

Page 13, lines 7-27:

- SD1 (10 H)/CT - If the FC is a CT with no returning of the token, the octet value is 10 H. The conflict can be solved by also checking the frame length, since the length of a CT is always only one octet, see figure [[7]] 6.

- SD2 (68H)/DC2, if the FC is a DC2 with long addresses and no token returning, the value is 68H. This conflict cannot be solved with 100% certainty, but the risk of misinterpretation can be minimized by checking as many known values as possible:

o The two LE octets must have the same value (in the range 4-249), and the Node octet 68 H. The length of the frame must also match the LE value.

In theory, an FF frame will match this format in one out of 16 million DC2 frame combinations, see figure [[8]] 7.

- SD4 (DCH)/DT1, if the FC is a DT1 with a long address, token returning and PP=00 (Priority), the value is DCH. The conflict can be solved by checking the frame length, since the FF DT1 with a long address always contains more than the 3 octets in the Profibus SD4 frame, see figure [[9]] 8.

Page 15, lines 9-23:

In FIG. [[5]] 9, an embodiment of a field bus adapter is illustrated showing the different elements in a field bus adapter. The field bus adapter is connected to the field bus network [[501]] 901 via a receiver [[503]] 903 and a transmitter [[311]] 911. The receiver could then be connected to an analog filtering unit [[305]] 905 for filtering and restoring the received data package. The received data is then ready to be processed according to the algorithm illustrated in FIG. 2, where a microcomputer [[307]] 907 could perform the steps of detecting the protocol according to 203 and 205 shown in FIG. 2. The microcomputer could comprise a microprocessor [[313]] 913 and some memory [[315]] 915 communicating via a communication bus [[317]] 917. The field bus adapter could also be adapted for receiving data from different types of transducers for measuring physical values such as temperature, speed, and/or distance, and the received data is then the measured physical value. In an

embodiment the transducer is connected to the microcomputer [[307]] 907 in the field bus adapter via an analog filtering unit 909 for filtering and restoring the data received from the transducer.